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## Civil society challenges the global food system: the International Monsanto Tribunal

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### ABSTRACT

The global food system has severe implications for human health, soil quality, biodiversity, and quality of life. This paper provides an analysis on how transnational alliances challenge the global food system. We illustrate this by focusing on the activities and hearings of the International Monsanto Tribunal (IMT), held in the Hague in 2016. The IMT provided a platform for civil society and enabled transnational alliances to demand attention for local struggles and legal disputes in relation to Monsanto's products. With the involvement of independent and renowned experts, the knowledge exchange between local victims and civil society was enhanced, and the IMT reinforced social movement's goals towards demanding justice for the negative effects associated with the global food system. The advisory opinion determined that Monsanto's practices are in violation with human rights standards. The IMT exemplified that there is an immediate need for structural change in the current global food system.

### KEYWORDS

GMOs; global food system; transnational movements; human rights; international peoples' tribunals; ecocide

## Introduction

The global food system has been at the centre of public scrutiny, criticism, and legal disputes regarding the negative impacts of its activities and products (Glover, 2010; Krinsky & Gillam, 2018; McMichael, 2009; Motta, 2014). Today, the global food system is dominated by a small number of transnational corporations, which promote a standardized technological package for food production, consisting of hybrid and genetically engineered seeds, machinery and chemical pesticides and fertilizers (Holt Giménez & Shattuck, 2011; McMichael, 2009).

A main argument for the introduction of new agrarian technologies in general, and of genetically engineered seeds in particular, is the need to increase food production for a growing world population in an economically-efficient and environmentally sustainable manner (Clapp & Scrinis, 2017; Glover, 2010). However, critics argue that these novel agro-industrial technologies and corporate practices have led to inadvertent negative economic, social, cultural, health, and environmental

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impacts (McMichael, 2009). The global food system is therefore increasingly confronted with a growing opposition from social movements worldwide (Holt Giménez & Shattuck, 2011).

This paper analyses an example of how civil society challenges the global food system. We focus on the International Monsanto Tribunal (IMT), a civil society initiative held in the Hague, the Netherlands in October 2016.<sup>1</sup> Monsanto is a U.S.-based transnational agribusiness that develops and commercializes genetically modified (GM) seeds and agrochemicals. The IMT is exemplary for how social movements form transnational alliances when their agendas, campaigns and goals are not adequately heeded at the national level. We argue that International Peoples Tribunals, such as the IMT, create an important space for connecting local groups, struggling with negative local impacts, with transnational alliances that challenge the global food system as a whole (Holt Giménez & Shattuck, 2011; Keck & Sikkink, 1999; Scoones, 2008).

The United Nations Guiding Principles on Business and Human Rights (UNGP) formed the guiding framework of the IMT. In 2011, the United Nations Human Rights Council endorsed the UNGP specifying corporate human rights responsibilities independent from government human rights obligations (UN, 2011). Numerous transnational corporations, including Monsanto, have expressed their commitment to respect human rights throughout their operational activities (see Business and Human Rights Resource Centre, 2018). However, in practice, human rights breaches continue to occur due to unclarity about what actual corporate human rights responsibilities are and mean in the localities of operations (Van der Ploeg & Vanclay, 2017) and due to the inability of national legal mechanisms to effectively respond to community complaints regarding adverse impacts involving multinational corporations' products and activities (Ruggie, 2013). Tribunals such as the IMT are of significant importance to create awareness about the existing gap between internationally agreed human rights standards, and responsibility for negative impacts experienced on the ground (Simm & Byrnes, 2014). We argue that, through the strengthening of international alliances, Tribunals like the IMT play an important role in the process of development and recognition of new legal norms that enable desirable structural changes in the global food system.

This paper is structured as follows. Section one examines how and why social movements challenging the global food system seek transnational alliances to amplify their claims. To understand the relevance of the IMT in a broader international context, in section two we discuss the concept of International Peoples Tribunals. Section three analyzes the IMT as well as the use of the United Nations Guiding Principles on Business and Human Rights (UNGP) as the legal basis for its advisory opinion. In section four, several of the testimonies given by individuals and communities affected by Monsanto are discussed, and we reflect on the advisory opinion rendered in April 2017. Finally, the conclusion outlines the potential of transnational alliances to challenge the global food system.

## Collective action against the global food system

A growing number of local, regional, and transnational social movements have organized to oppose the negative impacts of the global food system (Holt Giménez & Shattuck, 2011). Examples are the Mothers of Ituzaingó in Argentina (Arancibia, 2013; Leguizamón, 2016), the Confédération Paysanne in France (Heller, 2012; Morena, 2015), the Landless Rural Workers Movement (MST) in Brazil (Robles, 2001) and the transnational peasant movement, Vía Campesina (Edelman & Borras, 2016; Rosset, 2016).

The transnational agribusiness Monsanto has often been at the centre of activist demands (Cummins, 2013; Heller, 2012; Krinsky & Gillam, 2018; Scoones, 2008). Today, the company is one of the world's leaders in genetic seed engineering, agricultural biotechnology, and the production of

herbicides (Glover, 2010; Goldfarb & Zoomers, 2013; Oliveira & Hecht, 2016). Only a handful of transnational companies dominate the global food system, limiting competition and therefore allowing these companies to set ‘the rules of the game’ (McMichael, 2009). This oligopoly is further exacerbated by ongoing business mergers. In 2017, Chem–China bought Syngenta and DuPont merged with Dow, becoming Corteva Agriscience. In June 2018, Monsanto finalized its merger with Bayer. These three giant agribusinesses control seventy percent of the global agrochemical industry and over sixty percent of the global seed market (Elsheikh & Hossein, 2018).

Monsanto develops and commercializes GM crops such as soybeans, corn, and cotton. Soybeans have been modified to tolerate the spraying with glyphosate-based herbicides, which Monsanto commercializes under the *Roundup* brand. While corporate actors promote GM crops as a technological solution to address world hunger and poverty (Glover, 2010), critics point at the increasing commodification of seeds and land and the corporate control throughout the supply chain of food production (Craviotti, 2018; Goldfarb & Zoomers, 2013; McMichael, 2009; Oliveira & Hecht, 2016). Since the introduction of Roundup, scientists and international institutions have been hotly debating the impact of glyphosate on human health and the environment, resulting in diverging observations and conclusions about the product (FAO, 2005; Krimsky & Gillam, 2018; Richard, Moslemi, Sipahutar, Benachour, & Séralini, 2005; Séralini, Clair, et al., 2014; Séralini, Mesnage, Defarge, & Spiroux de Vendômois, 2014; Van den Berg et al., 2017).

Social movements that challenge Monsanto in particular and the global food system in general vary in their characteristics. In general, they aim to challenge structural aspects of the corporate food regime such as intellectual property rights over seeds, the implementation of biotechnology, the use of agrochemicals, and the absence of accountability for corporate social, environmental and human rights impacts (Arancibia, 2013; Motta, 2014; Scoones, 2008). Social movements confront large agribusinesses for instigating job loss in local areas, providing poor working conditions (Goldfarb & van der Haar, 2016; McKay & Colque, 2016; McMichael, 2009), increasing the price of local food staples (Craviotti, 2018), and for suppressing local and traditional practices related to nature (Giraldo, 2015). Beyond contesting corporate practices, movements also challenge international organizations that are legitimate and promote the harmful products of the global food system, such as the World Trade Organization, the International Monetary Fund and the World Bank (Holt Giménez & Shattuck, 2011; McMichael, 2012).

A growing body of literature documents that social movements continuously create new strategies, networks, alliances and linkages to challenge the global food system (Edelman & Borras, 2016; Hanna, Vanclay, Langdon, & Arts, 2016; Holt Giménez & Shattuck, 2011; Routledge, 2003; Scoones, 2008). Scholte (2014) emphasizes the fluidity of networks, and argues that activists particularly work and collaborate on a scale that provides a prospect of recognition and success. Transnational alliances in particular are important for creating common moral standards (Hanna et al., 2016; Keck & Sikkink, 1999), for comprehending the global and powerful character of the global food system, and for revealing the diversity of negative impacts (including violations of human rights) experienced in different localities and scales (Edelman & Borras, 2016; Holt Giménez & Shattuck, 2011).

Besides direct action, civil society has also engaged in a variety of international platforms to challenge the global food system. For example, the Global Network for the Right to Food and Nutrition unifies different struggles to protect human rights and especially the Right to Food (Global Network for the Right to Food and Nutrition, 2016). Another example is the Civil Society Mechanism (CSM) for relations with the UN Committee on World Food Security, which is the largest international space of civil society organizations that aim to eradicate food insecurity and malnutrition (CSM, 2018).

In line with the above transnational networks, the IMT arose from a network that involved the unification of different local movements that shared the belief in the need for resistance towards the global food system, in order to change how large-scale industrial agriculture is practiced. The IMT connected many actors from civil society (Cortellini, 2016), including the well-known transnational network of the International Food Sovereignty Movement, *Vía Campesina*. Therefore, it serves as a relevant case study on transnational networks focusing on food and agriculture. The IMT illustrates how both horizontal and vertical alliances were sought among organizations and people (see Scoones, 2008). Holt Giménez and Shattuck (2011) argue that resistance to the global food system is often decentralized and locally based and that this disconnected nature makes it difficult to press for structural change. The international setting of the IMT was an opportunity to overcome this disconnection.

### International Peoples Tribunals in a broader context

International Peoples Tribunals, such as the IMT, are not ordinary courts as they do not fall within the judicial order of a state nor are they set up by the International Criminal Court (ICC). They are rather ‘extraordinary’ courts often initiated by civil society organizations to examine the rules of law applicable to a highly problematic event or situation that involves severe violations of human and environmental rights (Byrnes & Simm, 2018; Fraudatario & Tognoni, 2018). The first International Peoples Tribunal, also referred to as ‘Opinion Tribunals’ or ‘International Citizens Tribunals’, was the Russell Tribunal in 1967. This tribunal was established to investigate the role of the US government for war crimes in Vietnam. Following the Russell Tribunal, over eighty tribunals have been organized, revealing the evident lack of accountability for adverse impacts experienced by local people (Simm & Byrnes, 2014).

A relevant organization in this context is the Permanent Peoples’ Tribunal, which was established in 1979 in Bologna (Fraudatario & Tognoni, 2018; Permanent Peoples’ Tribunal, 2015; Simm & Byrnes, 2014). The Permanent Peoples’ Tribunal has the aim to develop law ‘for and by people’ (Fraudatario & Tognoni, 2018, p. 135). The Tribunal established the Declaration of Algiers (1976), where the active role of people is considered of significant importance in ‘formulating and affirming rights’ (Fraudatario & Tognoni, 2018, p. 138). This organization is built around an international network of renowned legal experts, scientists, and other individuals recognized for their independence and competence (Permanent Peoples Tribunal, 2015). Experts provide advisory opinions on (potential) human rights violations including gross violations of human rights that are recognized under the Rome Statute of the ICC. In 2011, it held a hearing in Bangalore focussing on how transnational agrochemical corporations cause and/or contribute to ‘massive death, terrible harm to health, plunder of the environment and destruction of ecological balance and biodiversity’ (Permanent Peoples’ Tribunal, 2011, p. 1).

Tribunals have its limitations as their recommendations and advisory opinions do not have legal force, and thus they may seem to have little direct impact (Simm & Byrnes, 2014). However, by following formal court procedures including the involvement of international (legal) experts and scientists, these tribunals present an avenue wherein controversial issues can be openly discussed which is essential for catalyzing fundamental changes in the global system (Fraudatario & Tognoni, 2018).

### The International Monsanto Tribunal and the UNGP as its guiding framework

The judicial method of the IMT was modelled after the procedures of the International Criminal Court (ICC) and involved the presentation of evidence to impartial judges with recognized expertise

in the matter to render a judgment (IMT, 2018a). In total, five internationally recognized judges heard witnesses and experts from five continents (see Tables A1 and A2).

As is typical for International Peoples Tribunals, the IMT was organized in collaboration between social movements and international (legal) experts from a diverse range of countries. Vandana Shiva, internationally recognized environmental scientist and activist, and Marie-Monique Robin, journalist and director of *The World According to Monsanto*, were among the main initiators. Other high-profile individuals such as Olivier de Schutter, the former UN Special Rapporteur on the Right to Food (2008–2014), were members of the Steering Committee (IMT, 2018a). Simultaneously with the Tribunal hearings, a People's Assembly was held. The aim of the Assembly was twofold: to discuss strategies that can resolve the problems caused by the current global food system; and to find ways to change the global food systems' practices. The Assembly formed an opportunity for social movements from all over the world to exchange ideas on alternative development models (IMT, 2018a).

Another main topic was to strengthen the argumentation for the crime of ecocide to become recognized in international law. The term 'ecocide' refers to environmental damage and destruction of a territory on such a massive scale that it directly endangers the survival of the inhabitants of that region and causes long-term alterations to the global commons or ecosystem resources (Galston, 1967; Gray, 1996; IMT, 2017).

Approximately 750 people from over 30 countries participated in the hearings and events, and more than 10,000 people viewed the live broadcast of the hearings (IMT, 2018a). This interest in the IMT revealed the societal relevance of the topic and it demonstrated the global character of resistance towards the dominant global food system.

Monsanto was invited to participate in the Tribunal hearings, but it declined the offer (IMT, 2018a). Monsanto responded to the IMT by publishing two open letters from its internal Human Rights Steering Committee on the company's website. The first open letter was published a few days prior to the start of the Tribunal (see Monsanto, 2016), and the second letter was published after the advisory opinion was presented (Monsanto, 2017). Monsanto described the IMT as 'not a real dialogue. It is a staged event, a mock trial where anti-agriculture technology and anti-Monsanto critics play organisers, judge and jury, and where the outcome is pre-determined' (Monsanto, 2016). The second open letter stated that the Tribunal had merely maligned the company without providing credible evidence for its claims. Monsanto's response did not come as a surprise. It is commonly observed that defendants refuse to take part in People's Tribunals, according to Byrnes and Simm (2018, p. 20) 'a defendant's refusal to respond or appear makes it easier for critics to argue against the legitimacy of the tribunal.' The reason why Monsanto declined participation in the Tribunal, could be interpreted as a strategy to denigrate the IMT and thus the potential effect of the advisory opinion.

### ***The United Nations guiding principles on business and human rights***

An important outcome of the Tribunal was the rendering of an advisory opinion on Monsanto's responsibility for alleged violations of human rights (IMT, 2018a). In doing so, the Tribunal relied on the United Nations Guiding Principles on Business and Human Rights (UNGPs) (UN, 2011). Over decades, host states (governments) have shown to be unable or unwilling to effectively address the negative impacts caused by the activities of multinational corporations (Ruggie, 2008, 2013). In 2011, the endorsement of the UNGPs by the United Nations Human Rights Council laid out a fundamental principle; the corporate responsibility to respect human rights (UN, 2011). This principle



implies that all companies (including MNCs) need to respect human rights wherever they operate, and this responsibility applies regardless of government human rights obligations and (in)actions (UN, 2011). Whereas governments remain the primary duty bearers in International Law and thus have treaty obligations with regard to respecting, protecting and fulfilling human rights, all companies are now expected to 'Respect' the human rights set out in international human rights treaties, in the context of their project activities and products.

To operationalize and comply with the responsibility to respect human rights (UN, 2011), companies are required to undertake 'human rights due diligence' (see Ruggie, 2013), a process that identifies and addresses all human rights risks and impacts in relation to their activities, business relationships and products. Where impacts have already occurred, companies are expected to provide effective forms of remedy (UN, 2011). In practice, this means that multinational corporations need to undertake Human Rights Impact Assessments (HRIA) (Gotzmann, 2014), integrate human rights standards into their policies and procedures, and establish functional operational grievance mechanisms at the project site level (UN, 2011; Van der Ploeg & Vanclay, 2017).

The endorsement of the UNGP, and in particular the principle of the corporate responsibility to respect human rights, has resulted in both criticism and praise from various groups including in social movement circles. Its voluntary nature is a great disappointment by human rights advocates, academics and international NGOs (Deva & Bilchitz, 2013; HRW, 2011). However, taking into consideration decades long unclarity and disagreements, and thus absence of any form of agreed standard on international corporate human rights responsibilities, other authors have pointed out the significance of the UNGP as being approved by all global actors. The UNGP form the starting point for further developing and strengthening corporate human rights responsibilities (see Blitt, 2012). The United Nations Working Group on Business and Human Rights has continued developing and negotiating a business and human rights treaty (Bilchitz, 2016; De Schutter, 2016; OHCHR, 2018a). Recently, in July 2018, the draft Treaty on Transnational Corporations and Other Business Interests with Respect to Human Rights (TNC treaty) was made public (OHCHR, 2018b). This potentially shows the moving from voluntary standards towards multinational corporations legal responsibility for breaching international human rights standards.

The UNGP does not provide a legal basis for holding MNCs accountable to human rights breaches under international human rights law, but the application of the UNGP in the IMT is exemplary for how alleged corporate human rights abuses could become investigated in an international setting. With the lack of local redress for adverse (human rights) impacts caused by transnational corporations and in the absence of international legal rules for these corporations, the UNGP provide, so far, the only authoritative guidelines that clearly describe what companies are expected to do in terms of human rights.

### **The evidence presented during the International Monsanto Tribunal**

During the IMT the judges heard 28 witnesses and legal experts from 16 countries (see Tables A2 for a list of witnesses) regarding Monsanto's involvement in the negative impacts experienced by individuals and communities. To support the claims, the judges received several scientific studies from agro-specialists and experts,<sup>2</sup> as well as legal briefs and reports prepared by Olivier de Schutter in collaboration with the University of Louvain (Belgium) and Yale University (USA) (IMT, 2018a). Each court session was structured around specific impacts of the global food system and related to Monsanto products and conduct. These included: effects on human health, soils and plants, animal health, biodiversity, farmers and the right to food, and pressure on stakeholders and institutions.



## Human health

Direct and unprotected contact with agrochemicals is linked to many health issues, including miscarriages, congenital birth defects and non-hodgkin lymphoma cancer (Clausing, Robinson, & Burtscher-Schaden, 2018; REDUAS, 2010). Two mothers, Sabine Grataloup from France and María Liz Robledo from Argentina told how direct and indirect exposure to agrochemicals during their pregnancies caused congenital malformations on their children. These mothers were not the first ones to draw attention to the negative effects of pesticide drift on children's health (see Gupta, 2015). Sabine and María emphasized that they did not receive adequate information on the potential health risks of glyphosate and other agrochemicals, for example on the labels of these products. Moreover, they noted that similar health problems were occurring worldwide but that this information is not being shared sufficiently. Newell (2009), who argues that the Argentine state is complicit with transnational agribusiness to promote GM biotechnology in Argentina, Mother Maria Liz Robledo described how the Argentine government supports the global food system, and ignore the concerns of their citizens:

No one listens to us in our country. There are laws, but they are not implemented. There is no space, there is no authority, no official authority where we could file an official complaint in this context. This is true for the communal level, the regional level, and for the state level. The information we receive in this context is manipulated information, [it] is distorted. (María Liz Robledo)<sup>3</sup>

## Soil and plants

Biologist Don Huber<sup>4</sup> from the United States (represented during the Tribunal by biologist Art Dunham) provided evidence on the ecological damage glyphosate caused through its antibiotic activity, which drastically disrupted the natural biological balance of soil, human, and animal microbiomes (see Johal & Huber, 2009). Huber advocated to regulate the use of glyphosate, if not a total ban. Moreover, he argued that the irresponsible and excessive application of glyphosate on GM crops is a form of ecocide. Other concerns Huber raised were the loss of productivity, income, and the increase of toxins in the food chain.<sup>5</sup>

## Animal health

Farmer Id Borup Pedersen from Denmark described the link between the use of GM soy and Roundup and the increase of infertility, spontaneous abortions, and deformities in animals on his farm. He testified about the differences he noticed when he switched from GM-based fodder to non-GM plants as fodder for his pigs. For example, his sows became calmer, produced more milk, and became more fertile.

## Biodiversity

Mexican beekeepers Feliciano Ucan Poot and Angélica El Canche described how the process of producing and commercializing their organic honey has been affected by the global food system. The beekeepers explained that their honey had been contaminated because the bees gathered pollen from GM soy plants. They could not sell their honey on the European market because in Europe honey must be GMO free. Feliciano and Angélica emphasized how the well-being of Mayan communities has been affected by deforestation, water contamination, and in particular the use of

glyphosate. Concerns about loss of bio- and agrobiodiversity, excessive use of agrochemicals, deforestation, and pesticide drift over communities is echoed in the academic literature (see Lapegna, 2016; Leguizamón, 2014; Wainwright & Mercer, 2011). As summarized by Angélica El Canche:

We are witnesses of mass deaths, we see plants dying due to glyphosate and at the same time we see that we have fewer bees. The production of honey is reduced and [we] have suffered social problems because we cannot sell as much honey as we are used to.

### *Farmers and the right to food*

During the IMT different farmers expressed their concern about the right to food. Percy Schmeiser, a farmer from Canada, reported that Monsanto pressured him to pay royalties on transgenic canola seeds that dispersed onto his property. He became an international symbol and spokesperson for independent farmers' rights and the regulation of GM crops during his protracted legal battle against Monsanto. The scientist Bir Chaudhary, testified that the introduction of GM seeds is also indirectly linked to high suicide rates among male farmers in India who fall into debt due to paying royalties to multinational corporations, causing tragedies for families and disrupting the demographic composition of the country (see Shiva & Jalees, 1998). Ousmane Tiendrébéogo, a member of the National Farmers Union in Burkina Faso, testified on the negative impacts the expansion of Bt cotton had for small producers, including forced migration as a result of loss of jobs and income. This testimony is supported by scientific studies that explain the negative effects of the implementation of transgenic cotton in Burkina Faso (Dowd-Urbe, 2014; Gray & Dowd-Urbe, 2013; Sanou, Gheysen, Koulibaly, Roelofs, & Speelman, 2018).

### *Pressure on stakeholders and institutions*

The last set of witnesses denounced Monsanto for routinely employing dishonest, deceptive, and opaque tactics to gain approval for its GM crops and the associated herbicides, and to discredit findings about their impacts. The most famous case regarding the manipulation of scientific research is that of the French biologist, Gilles Eric Seralini and his research team (2014), who conducted one of the first long-term studies on the effects of glyphosate on rats. Their results documented the long-term toxicity of glyphosate, discrediting and contradicting Monsanto's own research. One of the researchers described the massive public relations campaign, financed by Monsanto, that was set-up to discredit their study (Seralini, Clair, et al., 2014). Moreover, the journal *Food & Chemical Toxicology* that accepted the article retracted it from publication. The paper was again published by the *Journal of Environmental Science Europe*. This story is confirmed by Krinsky and Gillam (2018) that got hold of internal documents of Monsanto.

These wide range of testimonies illustrate the global character of the global food system and its negative consequences on different scales (Craviotti, 2018; Giraldo, 2015; Goldfarb & van der Haar, 2016; Krinsky & Gillam, 2018; McKay & Colque, 2016; McMichael, 2009). The IMT collected all these testimonies including social, environmental and health impact statements to substantiate the claims made by the witnesses and legal experts.

### *The Tribunal's advisory opinion*

Six months after the Tribunal hearings, on 18 April 2017, the panel of judges issued an advisory opinion in the Hague. By utilizing the UNGP (UN, 2011) as the 'legal' basis, the judges determined

which rights were specifically affected taking into account the International Bill of Human Rights including the Universal Declaration of Human Rights (UDHR) (UN, 1948), the International Covenant on Civil and Political Rights (ICCPR) (UN, 1966b), the International Covenant on Economics, Social, and Cultural Rights (ICESCR) (UN, 1966a), the Convention on the Rights of the Child (CRC) (UN, 1989), and the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) (UN, 1979). The advisory opinion addressed whether Monsanto's conduct had violated, or otherwise negatively affected the rights recognized in these international treaties. The judges concluded that Monsanto's conduct had negatively affected four sets of human rights (IMT, 2017):

- *The right to a healthy environment:* Monsanto has engaged in practices that have caused serious and negative environmental impacts, such as threatening biodiversity and communities worldwide.
- *The right to food:* Monsanto's activities have negatively affected food availability for individuals and communities, food sovereignty, and capacity to produce adequate food.
- *The right to health:* Monsanto's practices have damaged not only the physical health, but also the mental health of individuals. The company's activities have interfered with the enjoyment of a healthy environment, as it actively employed dangerous substances, including polychlorinated biphenyls (PCBs), glyphosate, and GMOs.
- *Academic freedom indispensable for scientific research and right to freedom of expression, including access to information:* Monsanto has discredited independent scientific research by undermining the credibility of researchers. Monsanto suborned false research reports, including those by surrogates who failed to disclose their relationship with the company. It has pressured and bribed governments and public officials to approve Monsanto's products, notwithstanding credible scientific reports opposing approval. The abuse of the academic freedom indispensable for scientific research is aggravated by the health and environmental risks posed by Monsanto's conduct. When scientists do not enjoy the freedom necessary to carry out their work, society lacks tools to safeguard fundamental rights like the right to information.

The advisory opinion concluded that, 'if the crime of Ecocide were recognized in international criminal law – quod non for the time being –, the activities of Monsanto could possibly constitute a crime of Ecocide as causing substantive and lasting damages to biodiversity and ecosystems, affecting the life and the health of human populations' (IMT, 2017, p. 47). Already in 2010, a proposal on ecocide as an amendment to the Rome Statute was submitted by the British lawyer Polly Higgins to the International Law Commission (ILC), a UN body that serves to promote the progressive development of international law (Higgins, 2015). However, this proposal was not granted (Higgins, 2015). The IMT advisory opinion serves as a firm encouragement towards the ILC to eventually recognize ecocide as a fifth crime.

## Conclusion

The global food system has severe implications for human and animal health, soil quality, biodiversity, and farmers' quality of life and ability to feed their families. Therefore, a growing number of movements and experts express their discontent and challenge the conventional model of food production. This paper highlighted the potential of transnational networks to challenge the global food system. The International Monsanto Tribunal offers an example to better understand these transnational dynamics of resistance against the global food system.

The IMT resulted in the strengthening and creation of transnational networks, and provided an important opportunity for victims and experts to share their stories and evidence. Furthermore, the IMT, similar to other Peoples Tribunals held on controversial subjects, served as a platform to exchange knowledge among different actors in order to strengthen the network capacity of social movements to accomplish their goals.

The reputation of Monsanto was negatively affected by the IMT. With the recent 2018 merger with Bayer, Monsanto may have the chance to ‘clean’ the company name (Daniels, 2018). Yet it is likely that even after the merger, Monsanto and Bayer will continue to be at the centre of dispute. One example is that the California State Court ordered Monsanto to pay \$289 million to DeWayne Johnson (verdict given in August 2018). During this trial it was evidenced that Roundup caused DeWayne Johnson’s non-Hodgkin lymphoma cancer and that Monsanto failed to warn about the health hazards from being exposed to Roundup (Levin & Greenfield, 2018). This verdict confirms the validity of the testimonies given during the IMT. In response to the verdict, Bayer’s stock fell significantly and Bayer said it plans to appeal the ruling (Rosenblatt, 2018).

International Peoples Tribunals, such as the IMT, are important to create awareness about the existing gap between international law and the accountability for negative impacts experienced on the ground that involve the conduct of multinational corporations (Simm & Byrnes, 2014). The IMT underscored the need for transnational corporations to become subjected to international human rights norms. As the methodology deployed by the IMT was adopted from the International Criminal Court, the advisory opinion can be regarded as legitimate, and it could be used in formal legal procedures. Furthermore, the formal legal approach and depth of the IMT’s findings are likely be recognized by (other) international circles, which in time could result in more political influence and impact.

As the global food system continues to produce negative impacts worldwide, structural changes are urgently needed. The International Monsanto Tribunal created high visibility of the diverse and multi-scalar negative impacts of the global food system. Under the proposal of the concept of ecocide as a crime against humanity, it advanced the potential of an international legal framework by which transnational corporations can be held accountable for ecological degradation as a result of their activities.

## Notes

1. The first four authors participated in the International Monsanto Tribunal and the associated People’s Assembly. They listened to and recorded the testimonies and participated in several workshops during the People’s Assembly. Another important source of information has been the International Monsanto Tribunal website. Additionally, the fourth author interviewed Juan Andres Cumiz, a specialist in criminal law who helped to clarify the legal and future implications of the Tribunal.
2. For more information: [http://www.monsanto-tribunal.org/main.php?obj\\_id=159498052](http://www.monsanto-tribunal.org/main.php?obj_id=159498052).
3. All information on the testimonies including the quotations are available from the International Monsanto Tribunal website <http://www.monsanto-tribunal.org/>. See Table A2 for a list of witnesses.
4. Donald M. Huber is an emeritus professor at Purdue University; the former chairman of the USDA National Plant Disease Recovery Program; a member of the U.S. Threat Pathogens Committee; and a former member of the Advisory Board, Office of Technology Assessment, U.S. Congress; and of the OTSG Global Epidemiology Working Group. See [http://www.monsanto-tribunal.org/upload/asset\\_cache/76342986.pdf?rnd=IT6q1h](http://www.monsanto-tribunal.org/upload/asset_cache/76342986.pdf?rnd=IT6q1h).
5. For more information see Memo no. 7: Don Huber, Biologist, the Hague, 15–16 October 2016, accessed at [http://www.monsanto-tribunal.org/upload/asset\\_cache/76342986.pdf?rnd=IT6q1h](http://www.monsanto-tribunal.org/upload/asset_cache/76342986.pdf?rnd=IT6q1h).

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No potential conflict of interest was reported by the authors.

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## Appendix

**Table A1.** Background information on the judges of the International Monsanto Tribunal.

Judge	Country	Current affiliations include:
Dior Fall Sow	Senegal	<ul style="list-style-type: none"> <li>Consultant to the International Criminal Court, in the Hague, the Netherlands.</li> </ul>
Jorge Fernández Souza	Mexico	<ul style="list-style-type: none"> <li>Judge at the Court of Administrative Litigation of Mexico City, Mexico.</li> </ul>
Eleonora Lamm	Argentina	<ul style="list-style-type: none"> <li>Human Rights Director for the Supreme Court of Justice of Mendoza, Argentina.</li> </ul>
Steven Shrybman	Canada	<ul style="list-style-type: none"> <li>Partner at the law firm Goldblatt Partners LLP in Toronto, Canada.</li> <li>Member of the Boards of the Council of Canadians and the Institute for Agriculture and Trade Policy.</li> </ul>
Françoise Tulkens	Belgium	<ul style="list-style-type: none"> <li>Professor at the University of Louvain, Belgium.</li> <li>Associate member of the Belgian Royal Academy.</li> </ul>

Source: Authors, based on IMT, 2018b.

**Table A2.** List of witnesses at the International Monsanto Tribunal.

Topic	Country	Testifier	Role
(1) Impact on human health	France	Sabine Grataloup	Mother
	Argentina	Maria Liz Robledo	Mother
	USA	Christine Sheppard	Victim Roundup
	USA	Timothy Litzenburg	Lawyer
	Sri Lanka	Kolon Saman	Victim Roundup
	Sri Lanka	Channa Jayasumana	Expert environmental health
	Argentina	Damián Verzeñassi	Doctor public health
(2) Impact on soils and plants	Brazil	Marcelo Firpo	Public and environmental health researcher
	Argentina	Diego Fernández	Farmer
	USA	Art Dunham for Don Huber	Biologist
(3) Impact on animal health	USA	Art Dunham	Veterinarian
	Germany	Monika Krueger	Veterinarian
	Denmark	Id Borup Pedersen	Pig farmer
(4) Impact on biodiversity	Mexico	Feliciano Ucan Poot	Beekeeper
	Mexico	Angélica El Canche	Beekeeper
	Mexico	María Colin	Lawyer
	Australia	Steve Marsh	Farmer
(5) Impact on farmers and the right to food	Burkina Faso	Ousmane Tiendrébéogo	Farmer
	India	Krishan Bir Chaudhary	Scientist
	Bangladesh	Farida Akhter	Policy analyst
	Canada	Percy Schmeiser	Farmer
(6) Pressures on stakeholders and institutions	Colombia	Pedro Pablo Mutumbajoy	Victim Plan Colombia
	France	Paul François	Lasso victim
	Argentina	Juan Ignacio Pereyra	Lawyer
	Paraguay	Miguel Lovera	Agronomist
	France	Gilles Eric Séralini	Academic researcher
	Canada	Shiv Chopra	Expert regulatory agency
	United Kingdom	Claire Robinson	Academic researcher
	Germany	Peter Clausing	Toxicologist

Source: Authors, based on IMT, 2018a.